Regional Vegetation Management Project Review for Compliance with Mexican spotted owl Requirements
3/18/2021

Project Name: **Cragin Watershed Protection Project**
Which Recovery Plan is the project implementing: 1995 or **2012 Recovery Plan**
Reviewed by Forest Biologist (Name): **Mark Bellis**
Date Project Reviewed: **5/28/21**
Project lead and Forest Biologist will provide this completed document to the Forest NEPA Coordinator to post under the associated project in the Planning, Appeals and Litigation System.

Project Type:					
Timber Sale	Service Contract with tree cutting	**Grant or Agreement with Tree Cutting**	Force Account Thinning / tree cutting	Grant or Agreement with Prescribed Burning	**Force Account Prescribed Burning**
Purchaser	Contractor	Partner: **National Turkey Federation, Arizona Dept. of Forestry and Fire**	Project Contact	Partner	Project Contact: **Jeff Thumm**

NEPA Decision Project Name	NEPA Decision Document Type (DM, DN, ROD)	Responsible Line Officer	Decision Date
Cragin Watershed Protection Project	**Decision Notice**	**Laura Jo West**	**07/27/2018**

Review – Habitat and Management Areas If, the project is located within MSO habitat refer to and follow the Regional MSO Habitat Treatment Implementation Guidance	**Prescribed Fire**	**Mechanical**		
Is project within MSO PAC Core?	Yes	No		
Is project within MSO PACs outside of Core?	Yes	Yes		
Is project within MSO Critical Habitat?	Yes	Yes		
Is project within MSO Recovery, Protected (Outside of PACs), or Restricted Habitat?	Yes	Yes		
Is project within MSO Recovery Nest/Roost or Target/Threshold Habitat?	Yes	Yes		
Is the project within MSO Recovery Foraging/Nonbreeding habitat?	Yes	Yes		

MC is Mixed Conifer and PPGO is ponderosa pine gambel oak

Remarks on Habitat Determination (Example 1 – if no to MSO restricted yet Gambel oak or incidental Douglas fir is present may document not enough component as defined by recovery plan for restricted habitat designation but may become MSO habitat following treatment. Example 2 – if critical habitat on GIS map layer but stand is non-MSO Habitat document reason for this) To identify potential recovery habitat in the project footprint, information from Prather et al. (2008) was overlaid with the stand layer for the CWPP in GIS. The data used from this publication was the MSO nesting and roosting habitat predictive layer developed from data from the Forest Ecological Restoration Analysis project. Since the authors stated that this model overestimates owl habitat, only those stands that contained at least one pixel of habitat identified as "high suitability" were identified as potential recovery habitat. Additionally, all slopes greater than or equal to 40 percent were included as potential recovery habitat. Forest type (mixed conifer or pine-oak) was determined using the Ecological Response Unit layer created by the Four Forest Restoration Initiative planning team for the Rim Country analysis area. This layer delineates the differences between forest types such as pine – oak from pure ponderosa pine. This methodology was developed with USFWS Supervisory Fish and Wildlife Biologist Shaula Hedwall. A District-wide assessment to identify nest/roost replacement recovery habitat was conducted in 2017. In addition to those acres of nest/roost replacement habitat identified in previous decisions (Clints Well Forest Restoration Project, 2013 and Upper Beaver Creek Fuels Reduction Project, 2010), acres in the 4FRI Rim Country analysis area and CWPP were identified. For pine-oak acres identified as nest/roost replacement habitat exceeded recovery plan guidelines of 10% of the acres of this habitat on the District. For mixed conifer, the number of acres of nest roost replacement habitat identified on the District is slightly less than the recommended 25% of mixed conifer. During the spring/summer of 2017, a large portion of these stands were field-verified to better refine potential recovery habitat in the project footprint. Adjustments to the potential owl habitat layer were made to reflect forest types observed.				
If the answer is No for all questions above, then the project can proceed? If the answer is Yes for any questions above, then refer to the **Regional MSO Habitat Treatment Implementation Guidance** on how to proceed.		If no, why? (e.g. pure ponderosa pine stand, the EMU does include pine/oak as Restricted Habitat, pure PJ)		

Review Survey/monitoring	**Yes/No**	**Completed or Scheduled Survey Dates**
Were there 2 years of MSO survey prior to project implementation	Yes	All recovery habitat has current surveys as of 2021.
If the survey information for the project/treatment area is more than 5 years old, have follow up surveys been conducted or have they been planned prior to implementation of treatment?	Yes	Surveys in owl habitat will be conducted every 5 years until project completion.
If approaching the 5 year mark do we have plans during the current Fiscal Year to complete the additional year survey	Yes	Surveys in owl habitat will be conducted every

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prior to implementation?		5 years until project completion.
If answer to all is Yes can project proceed?		If no, why?
If any is No, then what remedy is needed? Estimated Timeframe?		

MSO 1995 Recovery Plan

- Protected Habitats:
    - Protected Activity Centers (PAC): a minimum of 600 acre buffer that is developed around Mexican spotted owl nest/roost sites that incorporates the best nest/roost habitat. Within the PAC, an established 100 acre buffer (core area) is developed around nest or primary roost areas.
    - All areas in mixed conifer and pine-oak types with slope >40% where timber harvest has not occurred in the past 20 years outside of PAC's.
- Restricted Habitats: Currently unoccupied Mexican spotted owl habitat occurring in pine-oak (depending on EMU), mixed conifer, and riparian forests. These habitats may be or have the potential to be used by owls for nesting, roosting, foraging, dispersal, and/or other life history needs.
    - Restricted Target/Threshold Habitat: Habitat outside of PAC's where nesting structure currently exists or can be managed to be met in the future (Table III.B.).
    - Restricted Non Target/Threshold Habitat: Habitat outside of PAC's that is currently not in nesting structure or less likely to be met in the foreseeable future. Forested stands managed to provide foraging, dispersal, wintering, or other habitat needs.

MSO 2012 Recovery Plan

- Protected Habitats: Protected habitat encompasses the area that is found within a Protected Activity Center (PAC). A PACis a 600 acre buffer that is developed around Mexican spotted owl nest/roost sites. Within the PAC, an established 100 acre buffer (core area) is developed around nest or primary roost areas.
- Recovery Habitats: Currently unoccupied Mexican spotted owl habitat occurring in pine-oak (depending on EMU), mixed conifer, and riparian forests and/or rocky canyons. These habitats may be or have the potential to be used by owls for nesting, roosting, foraging, dispersal, and/or other life history needs.
    - Forested Recovery Habitat: Forested habitat occurring in mixed-conifer and pine-oak (depending on EMU) forests outside of PAC's.
        - ❖ Recovery Nest/Roost Habitat: Forested stands identified as meeting or exceeding owl nest/roost conditions (See Tables C.2 & C.3 of MSO Recovery Plan).
        - ❖ Recovery Foraging/Non-breeding Habitat: Forested stands managed to provide foraging, dispersal, wintering, or other habitat needs.
    - Riparian Recovery Habitat: Riparian forests are plant communities affected by surface and subsurface hydrologic features of perennial or intermittent water bodies. Riparian

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forests are: 1) distinctively different tree and shrub species than the adjacent areas; and/or, 2) tree species similar to adjacent areas but exhibiting more vigorous or robust growth forms.

- Critical Habitats: Critical Habitat is specific geographic areas that are essential for the conservation of a threatened or endangered species and that may require special management considerations. Designated critical habitat only exists in areas defined as MSO habitat in the 1995 Recovery plan and its 2012 revision.
    - Primary constituent elements (PCE's): PCE's are essential to the conservation of the owl and include those physical and biological features that support nesting, roosting, and foraging. Primary constituent elements (PCE's) are only found within designated specific geographic areas of critical habitat.
        - ❖ Primary constituent elements related to forest structure.
            1. a range of tree species, including mixed conifer, pine-oak, and riparian forest types, composed of different tree sizes reflecting different ages of trees, 30 percent to 45 percent of which are large trees with a trunk diameter of 12 inches (0.3 meters) or more when measured at 4.5 feet (1.4 meters) from the ground;
            2. a shade canopy created by the tree branches covering 40 percent or more of the ground; and
            3. large dead trees (snags) with a trunk diameter of at least 12 inches (0.3 meters) when measured at 4.5 feet (1.4 meters) from the ground.

        - ❖ Primary constituent elements related to prey base.
            1. High volumes of fallen trees and other woody debris;
            2. A wide range of tree and plant species, including hardwoods; and
            3. Adequate levels of residual plant cover to maintain fruits, seeds, and allow plant regeneration.

        - ❖ Primary constituent elements related to canyon habitat (one or more of the following).
            1. presence of water (often providing cooler and often higher humidity than the surrounding areas.
            2. clumps or stringers of mixed conifer, pine-oak, pinyon-juniper, and/or riparian vegetation.
            3. canyon wall containing crevices, ledges, or caves.
            4.) high percent of ground litter and woody debris.

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